

L 52054-65	EWT(m)/EWA(i)/T/EWP(t)/EWP(k)/EWP(n)/EWP(b)/EWA(c)	Pf-4
MJW/JD/BW		
ACCESSION NR:	AR5006387	S/0137/64/000/012/I062/I062
SOURCE:	Ref. zh. Metalurgiya, Abs. 121408	34 33 B
AUTHOR:	Lokshin, F. L.; Derevyannykh, A. P.; Periseva, A. P.	
TITLE:	Influence of impact thermomechanical quenching on the quantity of residual austenite	
CITED SOURCE:	Sb. Metalovedeniye i term. obrabotka. M., Mashinostroyeniye, 1964, 130-134	
TOPIC TAGS:	metallurgy, ferrous metals, metalworking, metal testing	
TRANSLATION:	Impact thermomechanical quenching consists of heating steel to the austenite formation temperature and continuous impact during cooling. The impact load was communicated to the metal through a coolant by spark discharge. U10A, U12A, ShKh9, and ShKh15 steels were studied. Impact thermomechanical quenching of these steels was conducted under the following conditions: U10A, from 1000° in water; U12A, from 950° in water; ShKh9, from 840° in oil; ShKh15, from 840° and 1000° in oil. X-ray analysis established that impact thermomechanical quenching	
Card 1/2		

L 52054-65

ACCESSION NR: AR5005387

facilitates more complete conversion of austenite to martensite than ordinary tempering. Conditions of impact thermomechanical quenching were found under which no residual austenite was formed. For steel ShKh9, impact thermomechanical quenching from 840° is recommended (discharge voltage 60 kv, capacity of the condenser 0.36 μ f, time of treatment 20 seconds). There is no residual austenite. Under some impact thermomechanical quenching conditions complete conversion of austenite to martensite does not take place, in such a case the residual austenite is less stable than in steel tempered by ordinary methods: in ShKh9 steel quenched from 840° without impact, there is 12% residual austenite. After annealing at 150° and 200°, the residual austenite was still retained; it was removed only after annealing at 250°. After impact thermomechanical quenching (840°, 60 kv, 0.24 μ f 14 seconds) ShKh9 steel contains 8% residual austenite which is completely removed by annealing for one hour at 150°. Carbon and chromium increase the stability of austenite.

SUB CODE: MM

ENCL: 00

MLA
Card 2/2

18.7100 24.1000

67414

SOV/123-59-12-46679

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 12, p 108 (USSR)

AUTHORS: Lokshin, F.L., Pertseva, A.P.

TITLE: On the Problem of Hardening Steel in the Field of Hydraulic Shocks of Ultrasonic Frequency

PERIODICAL: Byul. tekhn.-ekon. inform. Sovnarkhoz Rostovsk. ekon. adm. r-na, 1958, Nr 7, pp 37-38

ABSTRACT: The author investigates the hardening of U12A steel in the field of hydraulic shocks of ultrasonic frequency, which are generated by an installation, the relaxation circuit of which ensures the frequency stability of discharges and makes it possible to regulate the frequency of electric pulses and the oscillation power. When there is an electric discharge in water, hydraulic shock waves and mechanical oscillations of ultrasonic frequency (HSUF) arise simultaneously. The hardness of steel specimens, after their having been heated to 950°C and hardened in the field of HSUF with a mechanical oscillation frequency of 600 kc, was measured, and microscopic and X-ray analyses carried out. The cooling rate of the specimens in the field of HSUF was higher than the ordinary one, because of a continuous dissipation of the

Card 1/2

67414
SOV/123-59-12-46577,

On the Problem of Hardening Steel in the Field of Hydraulic Shocks of Ultrasonic Frequency

steam jacket about the specimen. The quantity of residual austenite decreases in the same proportion as the effect of HSUF increases. At the same time the internal stresses ... in the steel relax and a decrease in the tetragonal phase of martensite takes place. When being treated in the field of HSUF, processes are taking place successively in the steel, which can be observed during the hardening and annealing processes. The work on developing an industrial installation and of selecting the conditions of treatment for different steel grades is continued. 1 figure.

R.A.P.

X

Card 2/2

5.3610

75693
SOV/80-32-10-42/b1

AUTHORS: Kost, A. N., Pertsov, L. D., Yudin, L. G.,
Kalinkin, S. F.

TITLE: Brief Communications. Catalytic Hydrogenation of Quinoline

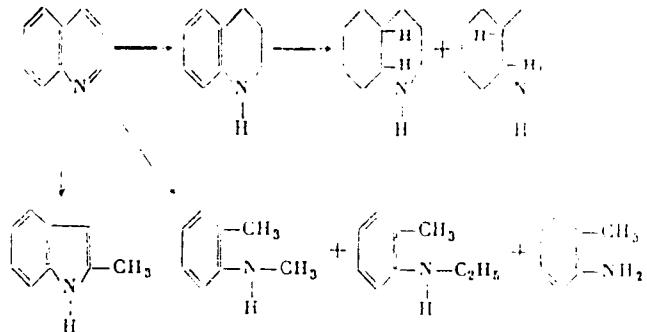
PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 10,
pp 2349-2351 (USSR)

ABSTRACT: Nickel on chromic oxide is used as an industrial catalyst for the hydrogenation of quinoline. The above catalyst is very effective. The hydrogenation already starts at 90° and 80 atm pressure. Two attempts were made to hydrogenate quinoline: 1) Hydrogen was introduced into the reactor at 50 atm pressure. The reaction was carried out at 110-115° and 100 atm pressure for 10 hr. 10% of catalyzate was obtained, calculated on the starting material. After vacuum distillation 7.8% of cis- and trans-decalin and 55.3% of 1,2,3,4-tetralin were obtained.

Card 1/3

Brief Communications. Catalytic
Hydrogenation of Quinoline

75693
SOV/SC-3.2-10-4.2/51



2) The reaction was carried out at 105-110° and at 100 atm pressure. 102.5% of catalyzate was obtained, calculated on the starting material. After distillation 96.4% of 1,2,3,4-tetralin and 2% of decalin were obtained. The residue (about 1%) was a tar-like product. There are 16 references, 7 Soviet, 3 German, 3 U.S., 1 Japanese, 1 Italian. The 3 U.S. references are: Travis, B., Morton, F., Jones, H., Robinson, J., J. Econ. Entomol., 42, 686 (1949); Gouck, H., Gilbert, J., ibid, 48, 499 (1955); Adkins, H.,

Card 2/3

Brief Communications. Catalytic
Hydrogenation of Quinoline

70.673
30V 1-1-1-1-1-1-1

Billica, H., J. Am. Chem. Soc., 70, 696 (1948).

SUBMITTED: June 9, 1968

Card 3/3

SOV137-59-3-7001

Translation from: Referativnyy zhurnal Metallurgiya, 1959, Nr 3, p 296 (USSR)

AUTHORS Lokshin, F. L., Pertseva, A. P.

TITLE On the Problem of Quenching of Steel in a Field of Ultrasonic Hydraulic Shock Waves (K voprosu o zakalke stali v pole gidravlicheskikh udarov ultrazvukovoy chastoty)

PERIODICAL Byul tekhn-ekon inform Sovnarkhoz Rostovsk ekon adn. s-sa
1958, Nr 7 pp 37-38

ABSTRACT The authors describe a device which utilizes an under-water electrical discharge to simultaneously initiate a hydraulic shock wave and produce mechanical vibrations of ultrasonic frequencies (HSWUSF). A portion of specimens of steel U12 were heated to a temperature of 950°C and were then quenched in water; other specimens were quenched from a temperature of 950° in a field of HSWUSF - the frequency of mechanical vibrations constituting 600 kilocycles per second. The time of treatment varied from t_1 to $t_2 + 10$ min (where t_1 is the time of cooling of specimens from the temperature prior to quenching to the temperature of the water). The investigation established the following facts: Hydraulic shock waves and

Card 1/2

SOV/37-59-3-7661

On the Problem of Quenching of Steel in a Field (cont.)

ultrasonic vibrations limit the possibilities of the formation of a steam jacket around the specimen being cooled and thus accelerate the process of cooling. The amount of retained austenite diminishes as the duration of the HSWUSF is increased (the entire austenite was transformed into martensite in five minutes). The action of the hydraulic shock waves relieves internal stresses and reduces the tetragonal nature of martensite. Phenomena commonly occurring in steel during quenching and tempering operations are also observed in steel which is being processed in a field of HSWUSF. Therefore, the employment of this process in the industry will make it possible to combine the quenching and tempering operations and thereby increase the productivity of the shops.

A B

Card 2/2

PERTSEVA, A.

JAPAN - Social Conditions

Working class as spearhead of the progressive forces of Japan in the fight for peace, national independence and democracy. Tep. eksp. no. 1, 1957.

Monthly List of Russian Acquisitions, Library of Congress, August 1957. 1957.

PERTSEVA, N.N.

Ammonia and glutamine content of brain tissue in cerebral anemia induced by ligation of the carotid arteries [with summary in English].
Biul.eksp.biol. i med. 46 no.7:63-67 Je'58 (MIRA 11:7)

1. Iz kafedry patologicheskoy fiziologii (nach. - prof. I.R. Petrov)
i kafedry biologicheskoy khimii (nach. - prof. G.Ye. Vladimirov)
Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova,
Leningrad. Predstavlena deystvitel'nym chlenom AMN SSSR V.N.
Chernigovskim.
(BRAIN, metabolism
ammonia & glutamine, eff. of carotid ligation (Rus))
(AMMONIA, metabolism,
brain, eff. of carotid ligation (Rus))
(GLUTAMINE, metabolism,
same (Rus))
(ARTERIES, CAROTID, physiol.
eff. of ligation on brain ammonia & glutamine level (Rus))

PERTSEVA, M.N.

Inhibiting effect of cortisone on the glucokinase activity
of skeletal muscles in chick embryos. Vop. med. khim. 11 no.1:
31-35 Ja-F '65. (MIRA 18:10)

1. Institut evolutsionnoy fiziologii imeni I.M. Sechenova,
Leningrad.

LEYBSON, L.G.; FERTSLVA, M.N.; PLISETSKAYA, E.M.; OGORODNIKOVA, L.G.

Lactic acid content in chicken embryo muscles in insulin
hypoglycemia. Biul. eksp. biol. i med. 3[i.e.53] no.3:
39-43 Mr '62. (MI:A :5:4)

1. Iz laboratorii po izucheniyu endokrinnyykh funktsiy i obmena
veshchestv (zav. - doktor biologicheskikh nauk L.G.Leybson)
Instituta evolyutsionnoy fiziologii imeni I.M.Schenova (dir. -
chlen-korrespondent AN SSSR Ye.M.Krops) AN SSSR, Leningrad.
Predstavlena deystvitel'nym chlenom AMN SSSR V.A.Ungel'gardtom.
(LACTIC ACID) (MUSCLES) (INSULIN SHOCK)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240120019-1

VEREVA, N.N.

Gusevka, 100 km. S.E. from Moscow, 1960
Ukr. Right. 21. 3. 1960. (17:5)
1. 2nd. The 2nd. stage of the development of the
Academy of Sciences of the USSR.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240120019-1"

EXCERPTA MEDICA Sec 18 Vol 3/7 Cardio. Dis. July 59

1866. Effect of temporary exclusion of the heart under hypothermia on the ammonia and glutamine contents of the brain (Russian text) PERTSEVA M. N. Sept. of Biochem., Dept. of Pathol. Physiol., S.M. Kirov Milit. Med. Acad., Leningrad *Vopr. Med. Khimii* 1958, 4/5 (379-384) Tables 2

It was established that within 5-12 min. after restitution of the circulation the ammonia content in the brain tissue of cats increased 3-fold as compared to the controls. Two hours afterwards the ammonia amount decreased, nearly reaching the level in controls. An increase of the ammonia content was observed again at 3 hr. after the circulation restitution, when the state of hypothermia began to recede and the manifestation of hypoxia to increase, followed by a lowering to the level of control values by the 6th hour. The glutamine content greatly increased through the period from 5 min. to 3 hr. and then decreased, reaching values below those of the controls.

(II, 18)

EXCERPTA MEDICA Sec 8 Vol 12/10 Neurology Oct 59

4890. THE CONTENT OF AMMONIA AND GLUTAMINE IN THE BRAIN TISSUE
IN CEREBRAL ANAEMIA CAUSED BY LIGATION OF THE CAROTID
ARTERIES (Russian text) - Pertseva M. N. - BYULL. EKSPER.
BIOL. I MED. 1958, 46/7 (63-67) Tables 3.

A study was made of the effect of hypoxia in the brain consequent on 'exclusion' of both common carotid arteries, with respect to the content of ammonia and glutamine. Ammonia was determined by the Balakhovsky-Brun's method, modified for brain tissue, while the nitrogen amide of glutamine was calculated from the ammonia content after 10 min. hydrolysis with 2 NH_2SO_4 at 100° C. The brain tissue of white rats reacted to anaemia by widespread stable inhibition. Increase in the quantity of ammonia by 50%, as compared to controls, was revealed in the CNS. The glutamine content tended to decrease. These changes were more pronounced in the brain tissue of rats in which cerebral anaemia was associated with attacks of general excitation and convulsions: ammonia then increased 3-fold, while glutamine decreased by 30-35% in comparison with controls.

PERTSEVA, M.N.

Effect of temporary exclusion of the heart from the circulation
in hypothermia on the ammonia and glutamine content of the brain.
[with summary in English]. Vop.med.khim. 4 no.5:379-384 S-0 '58

1. Kafedra biologicheskoy khimii i kafedra patologicheskoy
fiziologii Voyenno-meditsinskoy ordena Lenina akademii imeni
S.M. Kirova, Leningrad.

(BRAIN, metab.

ammonia & glutamine, eff. of temporary cardiac
exclusion from circ. in hypothermia (Rus))

(HEART, physiology

eff. of exclusion from circ. in hypothermia on
brain ammonia & glutamine (Rus))

(HYPOTHERMIA, exper.

same (Rus))

(AMMONIA, metab.

brain, eff. of temporary cardiac exclusion from circ.
in hypothermia (Rus))

(GLUTAMINE, metab.

same (Rus))

PERELOMA, N.N., VASIL'EV, V.P., GOLIKOV, V.V.,
KAL'SON, I.I. (USSR)

"Effect of insulin on the Carbohydrate Metabolism of the Chick Embryo."

Report presented at the 5th Int'l. Biochemistry Congress,
Moscow, 10-16 Aug. 1951.

PERTSEVA, M.N.

Lactic acid concentration in tissues of a developing chick embryo.
Biokhimiia 26 no.2:254-258 Mr-Ap '61. (MIKA 14:5)

1. Institute of Evolutionary Physiology, Academy of Sciences of the
U.S.S.R., Leningrad.
(LACTIC ACID) (EMBRYOLOGY--BIRDS)

EXCERPTA MEDICA Sec 2 Vol 12/7 Physiology July 59

2824. EFFECT OF TEMPORARY EXCLUSION OF THE HEART UNDER HYPO-THERMIA ON THE AMMONIA AND GLUTAMINE CONTENTS OF THE BRAIN (Russian text) - Pertseva M. N. Dept. of Biochem., Dept. of Pathol. Physiol., S. M. Kirov MIL. Med. Acad., Leningrad - VOPR. MED. KHIMII 1958, 4/5 (379-384) Tables 2

It was established that within 5-12 min. after restitution of the circulation the ammonia content in the brain tissue of cats increased 3-fold as compared to the controls. Two hr. afterwards the ammonia amount decreased, nearly reaching the level in controls. An increase of the ammonia content was observed again at 3 hr. after the circulation restitution, when the state of hypothermia began to recede and the manifestation of hypoxia to increase, followed by a lowering to the level of control values by the 6th hour. The glutamine content greatly increased through the period from 5 min. to 3 hr. and then decreased, reaching values below those of the controls.

(II, 18)

PERTSEVA, M.M.

Glycolysis in heart and muscles. Dr. I. N. Tikhonova, Moscow, USSR, 1963.
B1-A 1-1

I. Institut of Hygiene of the USSR Academy of Medical Sciences, Leningrad.

LITVINENKO, M.S.; KHVAT, M.B.; BRODOVICH, A.I.; PERTSEVA, N.Ya.;
PERMAN, N.M.; Prinimali uchastiye: LOPATINSKIY, D.K.; AGARKOVA, V.I.;
SAMOKHVALOVA, N.N.; KRONIK, I.L.

Obtaining sodium thiocyanate for the manufacture of nitron fibers.
(MIRA 16:9)
Koks i khim. no.6:34-40 '63.

1. Ukrainskiy uglekhimicheskiy institut (for Litvinenko, Khvat,
Brodochich, Kronik, Pertseva). 2. Khar'kovskiy koksokhimicheskiy
zavod (for Perman).
(Textile fibers, Synthetic) (Sodium thiocyanate)

BOBROV, Sergey Pavlovich; VESELOVSKIY, I.N., prof., nauchnyy red.;
MIKOYAN, E.P., otv. red.; PERTSEVA, T.V., tekhn. red.

[An Archimedien summer, or the story of a friendly group of
young mathematicians]Arkhimedovo leto ili Iстория sodruzhe-
stva iurykh matematikov. Moskva, Detgiz. Book 2. 1962. 327 p.
(MERA 15:11)

(Mathematics—Juvenile literature)

PERTSEVA, T. A. -- K voprosu o promysle marinai.

2726. PERTSEVA, T. A.-- K voprosu o promysle marinai. Soobshch. Tadzh. Filiala akad. Nauk SSSR, vyp. 12, 19.9, s. 33-34.

SO: Letchis' Zhurnal'nykh statey, Vol. 31, 19.9

PARTSEVA-OSTROUMOVA, T.A.; PAVLOVSKIY, Ye.N., akademik.

New data on the development of flounder (family Pleuronectidae).
Dokl. AN SSSR 91 no. 4:973-976 Ag '53. (MLRA 6:8)

1. Akademiya nauk SSSR (for Pavlovskiy). 2. Institut okeanologii
Akademii nauk SSSR (for Partseva-Ostromova).
(Flounders)

PERTSEVA-OSTROUHOVA, T.A.

Materials on the development of Far Eastern flounders (Pleuronectidae). Trudy Inst.okean, 11:221-232 '54. (MIRA 8:2)
(Soviet Far East—Flounders)

PERTSEVA-OSTROUMOVA, T.A.

Nutrition and speed of growth of *Schizothorax intermedius* McClellan
Trudy AN Tadzh.SSR 21:111-122 '54. (MLRA 9:12)

1. Institut zoologii i parazitologii imeni akademika Ye.N.Pavlovskogo Akademii nauk Tadzhikskoy SSR.
(Tajikistan--Carp)

PETROVA-CITROU VU, T. I.

Defl. ch. T. I. on furthering the study of
Fishes of the Bay of Peter the Great (Proceedings of the
Institute of Marine Biology, Vol. 19, No. 1, 1961) Investigations of the Marine
Fishery of the Bay of Peter the Great, Proceedings of the Institute of Marine
Biology of the Academy of Sciences of the Soviet Socialist Repub. USSR, No. 1, 1961.

RASS, T.S.; OSTROUMOVA-PERTSEVA, T.A.; GORBUNOVA, N.N.; KULIKOVA, Ye.B.

Propagation areas of some spring-spawning fishes of Far Eastern seas.
Trudy probli tem.sov. no.6:136-137 '56. (MLRA 9:11)

1. Institut okeanologii AN SSSR.
(Soviet Far East--Fishes)

OSTROUMOVA-PARTSEVA, T.A.

Research on the spawning and development of flatfishes off the
Maritime Territory coast. Trudy probl.i tem.sov. no.6:138-139 '56.
(MLRA 9:11)

1. Institut okeanologii AN SSSR.
(Maritime Territory--Flatfishes)

PERTSEVA-OSTROUMOVA, T.A.

Ichthyofauna of the lakes of the lower Vakhsh Valley and methods
for its reconstruction. Trudy AN Tadzh.SSR 115:171-177 '59.
(MIRA 15:5)

1. Institut okeanologii AN SSSR.
(Vakhsh Valley--Fishes)

PERTSEVA-OSTROUMOVA, T.A.

Reproduction and development of arrow-toothed halibuts of the genus
Atheresthes Jordane et Gilbert (Pleuronectidae, Pisces). Biol.
zhur. 39 no.11:1659-1669 N '60. (MIRA 14:1)

I. Institute of Oceanology, U.S.S.R. Academy of Sciences, Moscow.
(Bering Sea--Halibut)
(Embryology--Fishes)

PARTSEVA-OSTROUDIOVA, Tat'yana Andreyevna; RASS, T.S., prof., otv.red.;
GIDALEVICH, A.M., red.izd-vs; NOVICHKOVA, N.D., tekhn.red.

[Reproduction and development in Far Eastern flatfishes]
Reproducenie i razvitiye dal'nevostochnykh kambal. Moskva,
Izd-vo Akad.nauk SSSR, 1961. 483 p. (MIRA 14:4)
(Soviet Far East--Flatfishes)

PERTSEVA-OSTROUMOVA, T.A.

Effect of fixation on the sizes of eggs, praeslarvae, and larvae in
some flounder species of the family Pleuronectidae. Trudy Inst.
okean. 43:337-345 '61. (MIRA 14:6)

(Larvae—Fishes) (Fishes—Eggs) (Flounders)
(Zoological specimens—Collection and preservation)

PERTSEVA-GSTROUHOVA, T.A.

Possibility of transplanting flounders of the family Pleuronectidae
from Far Eastern seas into the Barents Sea. Trudy Inst.okean. 43:
346-350 '61. (MIRA 14:6)
(Barents Sea—Flounders) (Animal introduction)

PERTSEVA-OSTROUMOVA, T.A.

Characteristics of the reproduction and development of flounders
with benthonic and pelagic eggs. Vop. ekol. 5:161-163 '62.
(MIRA 16:1)

1. Institut okeanologii AN SSSR, Moskva.
(Pacific Ocean--Flounders) (Reproduction)

RASS, T.S.; GORBUNOVA, N.N.; PERTSEVA-OSTROUMOVA, T.A.

Investigation of the reproduction and development of fishes in the
Far Eastern seas of the U.S.S.R. Vop. ekol. 5:184-186 '62.
(MIRA 1962)

1. Institut okeanologii AN SSSR, Moskva.
(Pacific Ocean--Fishes)
(Reproduction)

PEREVA-OSTROUMOVA, T.A.

Some characteristics of the structure of larvae of the
family Myctophidae. Trudy Inst. okean. 73 76-92.
(MIR 116)

PERTSEVA-OSTROUMOVA, T.A.

Larvae of the flatfishes (Heteroformata) of the Gulf of Tonkin.
Trudy Inst. okean. 80:177-220 '65. (MIRA 18:10)

L 0009-67 EWT(m)/EWP(w)/EWP(v)/EWP(j)/EWP(k) IJP(c) FDN/WJ/EK/RM

ACC NR: AP6012124

SOURCE CODE: UR/0413/66/000/007/0043/0044

AUTHORS: Leont'yev, N. N.; Malakhovskiy, A. E.; Zakharov, M. A.; Pershutov, G. G.; Petrov, S. P.; Yermakov, V. V.; Komkov, A. N.

34

ORG: none

TITLE: A blower blade. Class 27, No. 180289

SOURCE: Izobreteriya, promyshlennyye obraztsy, tovarnyye znaki, no. 7, 1966, 43-
44.

TOPIC TAGS: blade profile, rotor blade, industrial blower, ventilation fan

ABSTRACT: This Author Certificate presents a blower blade fastened by a shaft and a coupling section to the sleeve of the driving wheel. The design increases the operating reliability under alternating loads. The shaft, at the point of fastening to the blade, has a longitudinal cross section made up of two frustums of a cone, combined along the smaller bases. These frustums are coated together with the entire blade by an overall layer of glass-reinforced plastic. This layer is tightly drawn together by means of a split tapered metal bushing and a disengaging coupling section (see Fig. 1). These units are coated with a subsequent

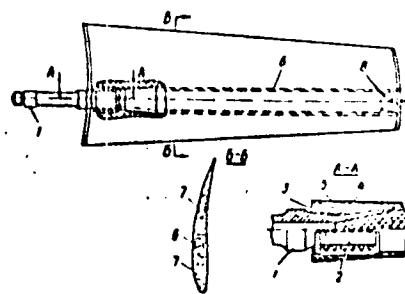
Card 1/2

UDC: 621.631.4-253.5

L 08999-67

ACC NR: AP6012124

Fig. 1. 1 - shaft; 2 - disengaging coupling section; 3 - glass-reinforced plastic layer; 4 - tapered split bushing; 5 - subsequent layer of glass-reinforced plastic; 6 - power spar; 7 - auxiliary spars; 8 - disks



layer of plastic deposited on the framework to produce the operating profile of the blade. The blade framework includes a power spar and auxiliary spars which form (in the transverse cross section) the operating profile. The blade carries on its end part a set of balancing disks. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 12Feb65

c... 1/2 ...t

COUNTRY : USSR
CATEGORY : Plant Physiology. Respiration and Metabolism. I
ABS. JOUR. : RZhBiol., No. 6 1959, No. 24505
AUTHOR : Permanskiy, Yu. V.
INST. :
TITLE : Various Types of Starch in Corn Grain
ORIG. PUB. : Priroda, 1958, No. 8, 118
ABSTRACT : No abstract

CARD: 1/1

KORCHAGINA, Ye.P.; OVCHINNIKOVA, T.D.; PERTSEVA, Zh.M.

Effect of the thermionic emission of the grid on the frequency of a self-oscillator. Nauch.dokl.vys.shkoly; radiotekh. i elektron. no.3:
112-119 '58. (MIRA 12:11)

1. Kafedra radioperedayushchikh ustroystv Moskovskogo energeticheskogo instituta.

(Oscillators, Electron) (Amplifiers, Electron)

9(4)

SCV '162-52-3-1-1'

AUTHORS: Korchagina, Ye.P., Ovchinnikova, T.D., and Pertseva,
Zh.M.

TITLE: The Influence of the Thermal Grid Emission on the
Work of a Self-Oscillator (Vliyanie termo-emisii
setki na rezhim avtogenatora)

PERIODICAL: Nauchnye doklady vysshey shkoly, Radiotekhnika i
elektronika, 1958, Nr 3, pp 112-119 (USSR)

ABSTRACT: The authors investigate the thermal grid emission of
a metalloceramic tube GI-12B used in a self-oscilla-
tor circuit. The experimental investigation was per-
formed on a self-oscillator with inductive feedback
as shown by figure 1. The experiments were performed
at a frequency of 25 kc. When the grid is heated
considerably, it begins emitting electrons like a
cathode. Such a thermal emission arises with over-
voltage conditions and with great feedback factors.
The thermal grid emission increases the anode current
cut-off angle and reduces the oscillator efficiency.
The phase of the feedback factor is important for the

Card 1/3

SOV/162-98-3-18 26

The Influence of the Thermal Grid Emission on the Work of a Self-Oscillator

formation of the thermal emission. The latter arises when the voltages U_g and U_a are in the opposite phase. A phase shift between U_g and U_a reduces the number of electrons moving from the cathode to the grid and the conditions for the arising of a thermal emission are made more difficult. Tests performed with different GI-12B tubes showed that the thermal emission begins with different tubes at different anode voltages. With GI-12B tubes the thermal emission of the grid begins when the components of the anode and grid currents reach 90-100 millamps at overvoltage conditions. There are 1 circuit diagram, 5 oscillograms, 6 graphs and 1 Soviet reference.

ASSOCIATION: Kafeira radioperedayus zhikn ustroevstva Moskovskogo energeticheskogo instituta (Chair of Radio)

Card 2/3

MALAKHOV, Georgiy Mikhaylovich; STARIKOV, Nikoley Ivanovich; SHOSTAK,
Afanasiiy Grigor'yevich; SHAFORENKO, I.P., redaktor: PRRTSEVSKIV
V.N., redaktor izdatel'stva; KARASEV, A.I., tekhnicheskiy redaktor

[Principal source of iron ore in the U.S.S.R.; a sketch of the
development of the Krivoy Rog Basin] Osnovnaia zhelezorudnaiia baza
SSSR; ocherk razvitiia Krivorozhskogo basseina. [n.p.] Metallurgizdat,
1957. 161 p.
(Krivoy Rog Basin--Iron mines and mining)

PERTSIK, A., konsul'tant

Labor norms, wages, and leaves. Sov. foto 19 no.5:85 My '59.
(MIRA 12:9)

(Photographers)

BARINOV, L.V.; GEODAKOV, A.I.; GRINEVICH, G.Ya.; IOFIS, Ye.A., kand.
tekhn. nauk; KRIMEMAN, P.M.; LAPAURI, A.A.; MINENKOV, I.B.;
PANFILOV, N.D.; PELL', V.G., kand. tekhn. nauk; PERTSIK, A.G.;
POLYANSKIY, N.N.; POPOV, A.N.; SILONOV, A.G.; SUROV, S.G.;
SHASHLOV, B.A.; TELESHEV, A.N., red.; MALEK, Z.N., tekhn. red.

[Manual for the amateur-photographer] Spravochnik fotoliubitelia.
Pod obshchey red. E.A.Iofisa i V.G.Pellia. Moskva, Iskusstvo,
1961. 530 p. (MIRA 15:7)

(Photography--Handbooks, manuals, etc.)

PERTSIK, N., inzh.

Organize transportation, leading, and unloading of cement in a more efficient manner. Stroi. mat. 2 №.10:17-19 О '56.

(MIRA 12:3)

(Cement--Transportation) (Loading and unloading)

TARASENKO, M.; PERTSIK, N.

The S-363A cement truck. Avt. transp. 57 no.12:35-36 D '59.
(MIRA 13:3)
(Motortrucks) (Cement--Transportation)

PERTSIK, N.; TARASENKO, M.

New semitrailers for cement transportation. Avt.transp. 38 no.11:43-
44 N '60. (MIRA 13:11)

(Cement—Transportation)

BANIT, F.G.; GERSHMAN, M.I.; LEONTENKOV, A.I.; OLEYNIKOVA, N.I.;
FERTSIK, N.G.; PIATISEK, V.Z.; SLIVITSKAYA, F.R.;
KHOKHLOV, V.K.; ASTANSKIY, L.YU., nauchn. red.; TYUTYUNIK,
M.S., rec.izd-va; BRUSINA, L.N., tekhn. red.

[Cement industry; its present status and prospects for development] TSementnaia promyshlennost'; sostoianie i perspektivy razvitiia. [By] F.G.Banit i dr. Moskva, Gosstroizdat, 1963. 258 p. (MIRA 16:12)
(Cement industries)

PARTSIK, N.G., inzh.

New design of trucks for cement transportation. Stroi. i dor.
mashinostr. 4 no.2:7-9 P '59. (MIRA 12:2)
(Cement--Transportation)

GUGEL', V., arkitektor; PERTSIK, Ye., inzh.-ekonomist

District planning in the Kuznetsk Basin. Na stroi. Ros. 3 no.5:11-
13 My '62. (MIRA 15:9)
(Kuznetsk Basin—Regional planning) 5

PERTSIK, Ye.N.

Future development of the industrial centers and cities of central
Siberia. Vop. geog. no. 57:250-274 '62. (MIRA 15:10)
(Siberia—Economic zoning)
(Siberia—Cities and towns)

PERTSIK, Yevgeniy Naumovich; BARANOVSKIY, N.N., red.

[K.I.Arsenov and his work on the districting of Russia]
K.I.Arsenov i ego raboty po raionirovaniu Rossii. Moskva,
Gos.izd-vo geogr.lit-ry, 1960. 118 p. (MIRA 14:7)
(Arsenov, Konstantin Ivanovich, 1789-1865)

GREKOV, A.A.; PERTSIKOV, Z.I.; SOKOLOVSKIY, N.N.

Introducing an automatic pipe stripper for drawing mills.
Biul. tekhn.-ekon. inform. Gos. nauch.-issl. inst. nauch.
i tekhn. inform. 18 no.10:48 0 '65. (MIRA 18:12)

L 3393-66 EWT(d)/EWT(m)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l)/EWA(c)

JD/HW

ACCESSION NR: AT5023377

UR/0193/65/000/007/0006/0008

621.778.06-462

38

AUTHORS: Pertsikov, Z. I.; Grekov, A. A.

1/4 55 44 55

8+1

TITLE: Experience gained in building and using a 150-ton tube drawing machine

99 55 14

SOURCE: Byulleten' tekhniko-ekonomiceskoy informatsii, no. 7, 1965, 6-8

TOPIC TAGS: tube drawing, tube drawing machine, pipe manufacture

44 55

ABSTRACT: A 150-ton tube drawing machine built by IZTM in 1964 is described. The machine (see Fig. 1 on the Enclosure) automatically takes bundles of tube blanks (up to 15 tons), opens them, pierces the blanks, draws the tubes, and delivers them. It is based on a two-chain layout and has the following specifications: drawing speed 17 m/min at 15 tons; return speed 25 m/min; drawing length 12 m; tube lengths 4-8.5 m; tube diameter 94-155 mm; piercing force 245 tons; 31.7 x 13 m machine size. The tube blank goes from loading area 1 and 2 (see Fig. 2 on the Enclosure) on incline 5 to loading station 6 and is pierced and delivered to the drawing station (consisting of frame 7, double chains 8, ejectors 9, and carriage 10). The transfer of the blank is performed by the apparatus shown in Fig. 3 on the Enclosure. The calculated cycle time is 72 seconds, which

Card 1/5

L 3393-66

ACCESSION NR: AP5023377

corresponds to a capacity of 570 m/hr of 8- to 9-m tubes. With a 0.7 utilization coefficient the annual output should approach 10 000 tons. Orig. art. has: 3 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 03

SUB CODE: IE

NO REF SOV: 000

OTHER: 000

Card 2/5

L 3393-66

ACCESSION NR: AP5023377

ENCLOSURE: 01

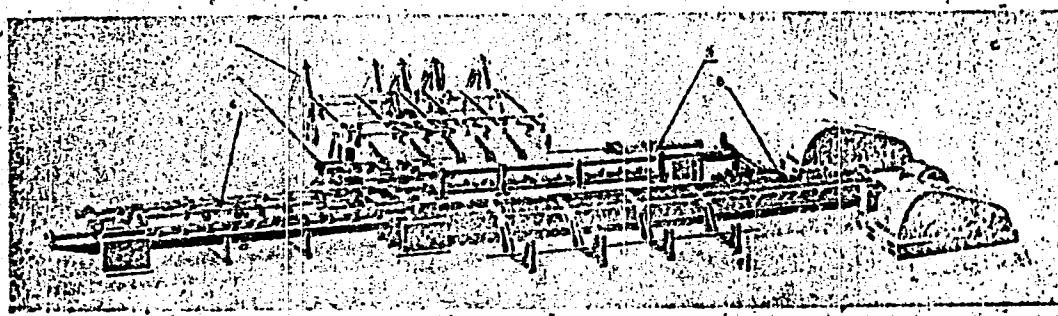


Fig. 1

General view:

- 1- loading area;
- 2- hydraulic piercer;
- 3- aligning mechanism;
- 4- transfer mechanism;
- 5- working line.

Card 3/5

L 3393-66

ACCESSION NR: AP5023377

ENCLOSURE: 02

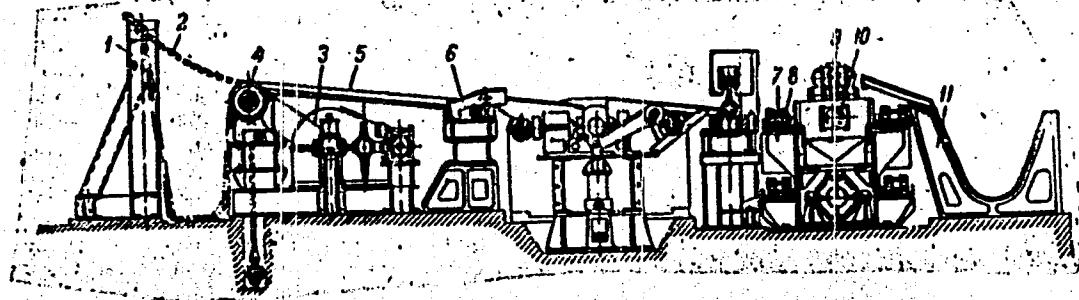


Fig. 2.
Cross sectional view

Card 4/5

L 3393-66

ACCESSION NR. AP5023377

ENCLOSURE: 03

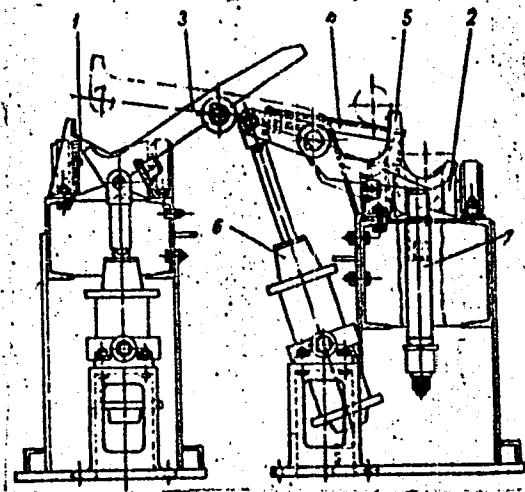


Fig. 3.
Transfer mechanism

Card 5/5 M

PFTSIKOV, V.I.; GROMOV, N.N.

Manufacturing and testing 150 ton capacity pipe-drawing mill.
Bull. tekh.-tekhn. inform. Gos. nauch.-tekhn. inst. nauch. i
tekh. inform. 19 no.7.6-8 J1 '65. (MFA 18:9)

PERTSIKOV, Z.I.; SOKOLOVSKIY, N.N.

Manufacturing continuous sizing mills. Biul. tekhn.-ekon. inform. Gos.
nauch.-issl. inst. nauch.i tekhn. inform. 18 no.6:23-26 Je '65.
(MIRA 18:7)

PERTSIKOV, Z.I.

Feed mechanism for charging billets. Biul. tekhn. -eksp. inform.
Gos. nauch.-issl. inst. nauchn. i tekhn. inform. 17 no. 18
Ap '64. (MIRA 17-18)

PRIYMAK-NAKOVSKIY, M.S.; ZARAK, V.A., inzhener; PERTSIKOV, Z.I., inzhener.

More attention to the work of machine designers. Vest.mash.35
no.10:19-22 O '55. (MIRA 9:1)
(Machinery design)

1. Radiographic studies of the use of iodine-bromine
elixir in treating patients with articular diseases. Vop.
zdrav. fizioter. i lech. fiz. kult'. 30 no.3(235-240) My.Je '65.
(M.R.B. 18-13)

1. Tsentral'nyy institut kurortologii i fizioterapii (direktor -
kand. med. nauk G.N. Kospanova). Moskva. Submitted February 2,
1964.

PERTSOV, A.N.; BOGOSLOVSKIY, A.A.

Report session of the Research Institute on Health Resort therapy
and Physical Therapy of the Ministry of Public Health of the
R.S.F.S.R. Vop. kur., fizioter. i lech. fiz. kul't. 26 no.1:91-
94 '61. (MIRA 14:5)
(PHYSICAL THERAPY)

ACC NR: AP7008695

SOURCE CODE: UR/0020/67/172/005/1137/1140

AUTHOR: Pertsov, A. V.; Goryunov, Yu. V.; Pertsov, N. V.; Shchukin, Ye. S.; Robinder, P. A.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Fine pulverization of metals in the presence of strongly adsorption-active metallic melts

SOURCE: AN SSSR. Doklady, v. 172, no. 5, 1967, 1137-1140

TOPIC TAGS: gallium, zinc, powder metal production, molten metal

ABSTRACT: On the basis of the assumption that the mechanical dispersion of solid metals should be accelerated in the presence of adsorption-active metallic melts, the pulverization of solid zinc in the presence of liquid gallium was studied. It was noted that quenched zinc alloys containing 1-6% Ga are converted after 5 min of pulverization into a powder with a particle size from one to several tens of microns. At higher Ga concentrations the pulverization ceased because a paste was formed. To prevent this, the particles formed by the pulverization were stabilized with butyl acetate. Gallium was found to speed up the pulverization and decrease the size of the particles formed. The effectiveness of its action (i. e., the decrease of the work of dispersion) was evaluated by determining the specific surface of the powder

Card 1/2

UDC: 541.18.053 : 546.3 + 532.6

ACC NR: AP7008695

formed as a function of time on the basis of sedimentation analysis. It was found that the introduction of even 1% Ga into zinc causes a 200-fold decrease of the work of dispersion. For the alloy with 10% Ga, the maximum surface is $0.3 \text{ m}^2/\text{g}$, which corresponds to a mean particle size of about 1.5μ . Gallium also accelerates the pulverization of tin, cadmium, aluminum and bismuth. It is expected that the proposed method of preparing metal powders (fusion with small amounts of an adsorption-active metal followed by pulverization in a stabilizing medium) will find broad applications, especially in powder metallurgy. Orig. art. has: 3 figures.

SUB CODE: 11 / SUBM DATE: 14 Apr 66 / ORIG REF: 006 / OTH REF: 004

Card 2/2

P E R T S O V A V

//

by Z. G. Pinsker ("Basis of diffractional methods of investigation of perfect crystals"), B. M. Rovinskiy and L. M. Rybakova ("Investigation of dependence of mechanical properties on characteristics of structure of metals"), L. M. Utevskiy and P. M. Usikov ("Application of microscopy in investigation of structure of alloys"), A. A. Predvoditelev and N. A. Tyapunina ("Role of reproduction of dislocations in process of plastic flow"), A. V. Pertsov, N. V. Pertsov and E. D. Shukin "Self-producing internal dispersion of metals under action of strongly superficially-active metallic melting") and I. L. Mirkin ("Problems of structural investigations, advanced by requirements of progress of technology").

reports presented at the 3rd Intervuz Conference on Strength and Ductility of Metals, Petrozavodsk State University, 24-29 June 1963.

(reported in Fizika Metallov i Metallovedeniye, Vol. 16, No. 4, 1963, p 640.
JPRS 24,651 19 May 1964.

PERTSOV, A.V.; POLOMIN, A.I.

High-temperature drying of green pine logs and their subsequent
impergnation with oily antiseptics. Mauch.sooob. TSNIISK no.6:3-
76 '61. (MIRA 14:11)

(Pine)

(Wood—Preservation)

PERTSOV, A.V.; MIRKIN, L.I.; PERTSOV, N.V.; SHCHUKIN, Ye.D.

Spontaneous dispersion under conditions of a randomly regular free interphase energy. Dokl. AN SSSR 158 n. 5. 1964. 60-63. (MIRA 17:10)

I. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. Predstavлено akademikom P.A.Rebinderom.

PERTSOV A V

S/070/63/008/001/011/024
E132/E460

AUTHORS: Shchukin, Ye.D., Kochanova, L.A., Pertsov, A.V.

TITLE: The temperature at which the transition from brittleness to plasticity occurs when the strength is lowered by absorption effects

PERIODICAL: Kristallografiya, v.8, no.1, 1963, 69-74

TEXT: It was shown earlier that single crystals of Zn, coated with a thin layer of Hg, show a brittle fracture at room temperature for very low strains because of the reduction in strength by the absorption effect. Without Hg, brittle fracture occurs only at low temperatures. The brittleness is related to the stability of a crack. Here, rods of Zn of varying purity, with and without amalgamation, have been pulled at a constant rate of deformation (10%/min) at temperatures from -200 to +200°C. The plasticity (limiting crystallographic slip) and strength $K = (p_c t_c)^{1/2}$ where p_c is the critical normal strain and t_c the critical shear strain, are plotted against temperature. It seems that the differences are connected with the greater strength of the pinning of dislocations in amalgamated Card 1/2

S/070/63/008/001/011/024
E132/E460

The temperature at which ...

crystals as a result of the absorption on to the dislocations of atoms of Hg. However, the matter is not simple and it may be that Hg only fixes dislocations near growing cracks into which Hg atoms penetrate from the surface, the effects in the bulk of the material being small. Similar phenomena have been observed with Zn crystals coated with Ga but an accompanying development of plasticity did not take place. There are 4 figures.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR
(Institute of Physical Chemistry AS USSR)

SUBMITTED: February 14, 1962

Card 2/2

KOLESNIKOV, B.V., starshiy inzh.; PERTSOV, A.Yu., starshiy inzh.

Intermittent exploitation of strippers. Neftianik 5 no.3:
13-15 Mr '60. (MIRA 1.:9)

1. Promysel No.3 neftepromyslovogo upravleniya Abinneft: (for
Kolesnikov). 2. Normativno-issledovatel'skaya stantsiya
upravleniya Krasnodarneft: (for Pertsov).
(Oil fields—Production methods)

KRUTIKOV, B.S.; PERTSOV, A.Yu.; PUSTOVYTT, S.P.

Developing and testing equipment for separate water injection
into two beds through one injection into two beds through one
injection well on the Romashkino oil field. Nefteprom. delo no.?:
19-23 '64. (MIRA 17:8)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut
i neftepromyslovoye upravleniye "Leninogorskneft".

PrintSov, A.Yu.

We are introducing mechanized light equipment for underground repair of wells. Neftiauk 2 no. 7. 11-12 S '57. (Mika 10:9)

1. starshiy inzhener po dobyci nafti nauchno-issledovatel'skogo sentera Krasnodarneft'.

(Oil wells--Equipment and supplies--engineering)

PERTSOV, A.Yu.

Using a set of equipment for underground repair of wells. Neftianik
2 no.5:12-13 My '57. (MLRA 10:5)

1. Starshiy inzhener po dobyche Normativno-issledovatel'skoy
stantsii ob"edineniya Krasnodarneft'.
(Oil wells--Equipment and supplies--Repairing)

PERTSOV, A.Yu.

Theory of a vibrational pump for lifting water from the lesser depths. Trudy VNII no.41:178-194 '64. (MIA 17:11)

PERTSOV, G. I.

"The New Series of 'Kuzbass'-Type Explosion-Proof
Mine Electric Motors Up to 100kw in Power", Vest. Elektro-
Prom, No. 12, 1949; Engr, Stalin Prize Laureate
(Electromechanical Plant, Ministry of the Electrical
Industry). -cl949-,

PERTSOV, G. I., Candidate Tech Sci (diss) -- "The starting properties and the power of the electric motors of mine combines". Kemerovo, 1957. 20 pp (Min Higher Educ USSR, Donets Order of Labor Red Banner Industrial Inst im N. S. Khrushchev), 125 copies (KL, No 26, 1959, 126)

PERTSOV, G. I.

58/49T50

USSR/Electricity
Motors, Induction
Electrical Machines

May-49

"Calculation of the Starting Characteristics
of Double Squirrel-Cage Motors in Relative
Units," B. Sh. Tabachnik, Engr, Laureate of
Stalin Prize, Head of Elec Mach Ind, Min of
Elec Ind G. I. Pertsov, Engr, Laureate of
Stalin Prize, L. V. Zhivotovskiy, Engr, Electro-
Tech Plant, Min of Elec Ind, 5 pp
"Vest Elektro-Prom", Vol XX, No 5

Detailed technical treatment of starting

58/49T50

USSR/Electricity (Contd)

May 49

characteristics of double-cage induction motor.
Calculates starting moment and currents for
various ratios of effective resistance of
outer rotor bars to inner ones and various
ratios of rotor reactance to effective resis-
tance of the slot part of the rotor winding.
Gives three tables.

58/49T50

PERTSOV, G.I., kand.tekhn.nauk; KOVALEV, Ye.B., inzh.; GORBOVTSOV, R.B., inzh.

Determination of the heat emission of the frameworks of enclosed
asynchronous motors. Vest. elektroprom. 33 no.10:32-35
0 '62.

(MIRA 15:9)

(Electric motors, Induction-Cooling)

AUTHOR PERTSOV, G.I.Doc., (Kemerovo) 105-6-16/2c
TITLE Method of Heat Calculation for Mining Combine Motors.
PERIODICAL (Metodika teplovych rascheta i vigateley gornykh kombaynov - Russian)
Elektrичество, 1957, Nr 6, pp 58 - 64 (U.S.S.R.)

ABSTRACT Closed asynchronous motors with short-circuited rotors are used for driving mining combines. The present methods of calculation are analyzed and the author shows that neither the theory of the heating of two homogeneous bodies nor the theory of the heating of three homogeneous bodies can be employed for the calculation of asynchronous motors. A multiple equivalent heat diagram, based on eight heat sources, is suggested. The system of the eight equations is written down and the following is assumed- 1) -The motion of the heat flows in the steel of the stator and the rotor is only radial. 2)-The heat flow from the rotor to the copper of the stator is small compared with that from the rotor to the stator steel, and it is neglected. 3)-The surface of the motor is equipotential. A useful method for the calculation of the heat of closed asynchronous motors is given by which the power of the motors can be determined. The method consists of the following stages-1) A multiple equivalent heat diagram is built up on the basis of eight heat source. 2) The four directions of the heat flows from the rotor and two directions from the stator windings are determined. 3)- The quantitative values of the required six heat flows from the rotor and from the stator windings are determined. 4) -The real heat flows in all sections from the stator windings to the surrounding air are determined. 5) -After the determination of the real heat flows in the single parts of the motor and with the data of con-

Card 1/2

HERTSOV, G.I., detsent (s. Leningrad).

Thermal calculation methods for mine cutter-loader motors. Elektrichesvo
no.6: 56-64 Je 150.
(Coal mining machinery)
(Electric motors)

(MPA 10:8)

PERTSOV, I.I., podpolkovnik meditsinskoy sluzhby, dotsent

Early diagnosis of tuberculosis. Vcen.-med. zhur. no.9:66-67 S '51.
(TUBERCULOSIS--DIAGNOSIS) (MIRA 9:9)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240120019-1

PEFTSOV, L.A.

Content of natural fragmentary radioactive isotopes in the molluscs.
Radiobiologia 4 no.4: 19-623 1964. MIRA .

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240120019-1"

PERTSOV, L.A. prof.

"Distribution, biological effect and migration of radioactive isotopes". Med. rad. 7 no.11:86-88 N°62. (MIR 16:9)
(RA.101SUTOPiS)

FERTSOV, Lev Aleksandrovich; VOISHEV, A.A., nauchn. red.;
SIRNOV, M.A., red.

[Natural radioactivity of the biosphere] Prirodnaia radioaktivnost' biosfery. Moskva, Atomizdat, 1964. 314 p.
(MIRA 17:8)

PERTSOV, L. A.

Cand. Veterin Sci.

Dissertation: "Changes in Albumin Fractions of the Blood Serum of Horses
in Case of Certain Internal Disorders."

29 Apr. 49

Moscow Veterinary Academy.

25(1), 5(3), 5(1)

AUTHORS: Mozhkin, P. A.,
Preobrazhenskaya, Ye. A.; Pertsov, L. D.

SCV 64-56-7-2 18

TITLE: The Hydrogenation of Adiponitrile to Hexamethylene Diamine
on the Cobalt Skeleton Catalyst (Gidrirovaniye adiponitriila v
geksametilendiamir na katal'tovom skeletnom katalizatore)

PERIODICAL: Khimicheskaya promyshlennost', 1958, Nr 7, pp 399-401 (USSR)

ABSTRACT: In industries the hydrogenation of adiponitrile is carried out according to continuous and discontinuous methods. The cobalt catalysts proved to be the most efficient (Refs 6, 7), and methanol, ethanol and butanol as well as dioxan and tetrahydrofuran were used as solvents (Refs 10, 14, 16, 18, 19). In the present case it was attempted to increase the yield of hexamethylene diamine and to improve the technology of the hydrogenation process. A continuous and a discontinuous method were devised. Skeleton nickel in methanol saturated with dry ammonia gas was used as a catalyst. In the periodic process a pressure of 100-150 atmospheres absolute pressure and in the continuous process one of 200 atmospheres absolute pressure were employed, in either case at temperatures of 80-90°.

Card 1/2

The Hydrogenation of Adiponitrile to Hexamethylene Diamine on the Cobalt Skeleton Catalyst

SOV/64-58-7-2/18

The discontinuous hydrogenation process was carried out in a 1 l autoclave (with stirrer). 3-4 hydrogenations were carried out with one catalyst sample as in the fifth hydrogenation a sharp drop of the yield was observed. The consumption of the catalyst thus was 2-3% of the weight of the adiponitrile used. The maximum yield of hexamethylene diamine is given to be 80-85%. The continuous hydrogenations were carried out in an arrangement (diagram) with a reactor of a diameter of 23 mm, a height of 900 mm and a volume of 500 ml. The maximum hexamethylene diamine yield of 90-95% was in this case obtained with a mixture of 20.4% adiponitrile, 64.1% methanol and 15.5% ammonia. The catalyst operated under optimum conditions for 600 hours. There are 1 figure, 3 tables, and 21 references, 4 of which are Soviet.

Card 2/2

AM5001441

BOOK EXPLOITATION

UR/

Pertsov, Lev Aleksandrovich

The natural radioactivity of the biosphere (Prirodnaya radioaktivnost' biosfery)
Moscow, Atomizdat, 1964. 314 p. illus., biblio. 1600 copies printed.
Scientific editor: A. A. Moiseyev; Editor: M. A. Smirnov; Technical editor:
N. A. Vlasova; Proofreader: N. A. Svetlova

TOPIC TAGS: natural radioactivity, biosphere, radiation hygiene

PURPOSE AND COVERAGE: The biosphere has been defined by V. I. Vernadskiy as the external shell of the earth , within which all life processes organisms occur. In this monograph, handbook data characterizing the levels of radioactivity of different components of the biosphere are summarized, and phenomena are described and laws stated so that the basic principles of the dynamic behavior of the indexes of natural radioactivity of the biosphere can be understood more fully, thus enabling correct interpretation of the radiation-hygiene arrangements in each real case. Appropriate references are given at the end of each chapter.

Card 1/2

UDC: 550.35

AM5001441

TABLE OF CONTENTS:

Introduction --	3
Ch. 1. Origin of natural radioactivity of the biosphere --	10
Ch. 2. Physical and biogeochemical properties of naturally occurring radioactive isotopes --	31
Ch. 3. Radioactivity of rock --	65
Ch. 4. Radioactivity of soils --	95
Ch. 5. Radioactivity of the sea --	118
Ch. 6. Radioactivity of fresh waters --	143
Ch. 7. Radioactivity of the atmosphere --	170
Ch. 8. Radioactivity of plants --	205
Ch. 9. Radioactivity of animals --	224
Ch. 10. Radioactivity of the human body --	241
Ch. 11. Cosmic rays --	261
Ch. 12. Ionizing radiation in the biosphere --	277

SUB CODE: 18, 08/SUEM DATE: 13Mar64 / ORIG REF: 261 / OTH REF: 239

Card 2/2

112965-63

RMP(j)/EPF(c)/EMT(m)/BDS AFFTC/ASD PC-4/Pr-4 RM/WW

ACCESSION NR: AP3000394

8/0191/63/000/005/0007/0010

72
70

AUTHOR: Zarubin, G. G.; Rubtsova, I. K.; Smirnov, M. I.; Pertsov, L. D.; Dolgov, F. F.; Kokorev, V. V.; Zhilina, R. D.

TITLE: Use of alkylarylphtosphates for plasticizing polyvinylchloride

15

SOURCE: Plasticheskiye massy*, no. 5, 1963, 7-10

TOPIC TAGS: alkylarylphtosphates, polyvinylchloride, plasticizers, esters, calendar method, sodium salts

ABSTRACT: The plasticizing qualities of DAFF (mixed ester of phenylphosphoric acid and 2-ethylhexyl alcohol), prepared by a technique developed at NIIPM from phenol, phosphoryl chloride, and 2-ethylhexyl alcohol, are compared to those of several other esters of phosphoric acid obtained in normal C_{sub} 7 - C_{sub} 9 alcohols and C_{sub} 6 - C_{sub} 8 isocalcohols and with the widely used plasticizers tricresylphosphate (TCP) and dibutylphthalate (DBP). The dialkylphenylphosphates are recommended as substitutes for the two latter plasticizers for obtaining soft fire- and frost-resistant polyvinylchloride plastics suitable for fabric base preparation by the calendar method. DAFF and the dialkylphosphates were superior in frost-resistance to DBP and TCP; they were more fire-resistant than DBP, but less so than TCP. The physico-mechanical properties of the individual dialkylphenylphosphates were

Card 1/2

L 12965-63

ACCESSION NR: AF3000094

not markedly different, though plasticizers containing a larger number of aryl groups yielded plastics which were less flammable, but which had poorer frost-resistance. Increasing the amount of plasticizer used reduced the toughness of the resultant plastic by about 50%, but increased its frost-resistance. Lowering treatment temperature from 140 to 120C also decreased toughness. The presence of up to 50% sodium salts in DAPP had little effect on plasticizing conditions; larger amounts reduced plasticizer-polyvinyl-chloride compatibility and reduced the toughness and frost-resistance of the resultant plastic. Orig. art. has: 4 figures, 5 formulas, 2 tables.

2

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 10Jun63

ENCL: 00

SUB CODE: MA

NO REF Sov: C02

OTHER: 009

Cord 2/2

06213
SOV/64-59-6-5/28

5(1)

AUTHORS: Moshkin, P. A., Lutkova, V. I., Pertsov, L. D., Kalinkin, S. F.

TITLE: Method for the Separation of Tetrahydrofuran From Reaction Gases

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 6, pp 484 - 486 (USSR)

ABSTRACT: A new method has been developed by NIIPM, by which furan is not separated from the gas mixture after the decarbonylation of furfurole but in which the whole gas mixture is carried on to hydrogenation (Ref 19). The latter takes place on a nickel catalyst, whereupon the gas is cooled to room temperature. In this process part of the tetrahydrofuran is separated. The rest of the tetrahydrofuran remains in the waste gases from which CO₂ is removed; the waste gases are introduced into the hydrogenation cycle and thus act as a kind of carrier gas saturated with tetrahydrofuran (at room temperature). The decarbonylation of furfurole (Fig 1: scheme) is carried out by the method described in reference 20. The catalyst was obtained from a nickel-aluminum alloy (1 : 1) by leaching out 40% of the aluminum in an appropriate column. The hydrogenation of furan (in the gas mixture) took place in a tube reactor (Fig 2: scheme

Card 1/2

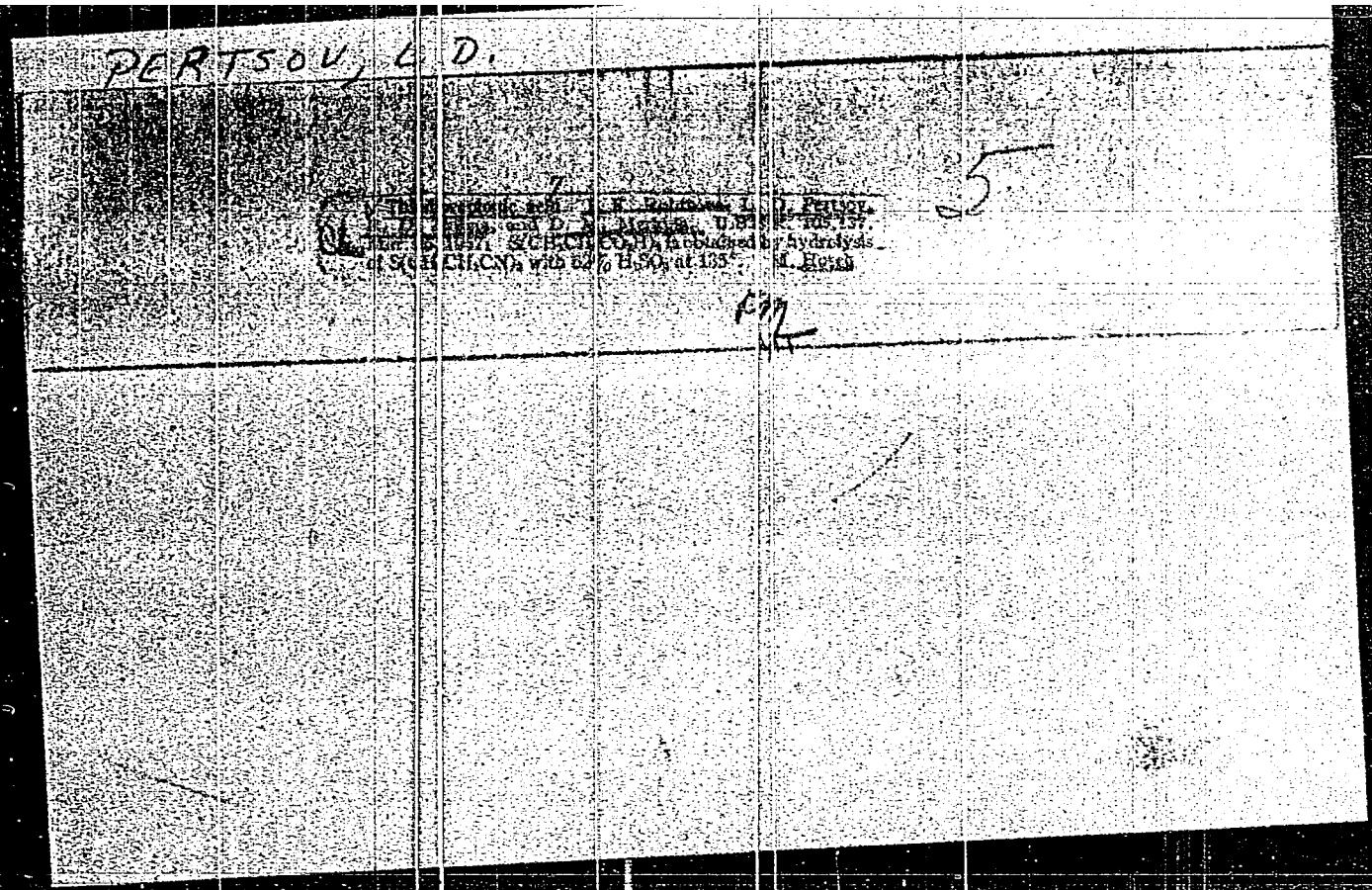
MOSHKIN, P.A.; PHOBRAZHENSKAYA, Ye.A.; FERTSOV, L.D.

Hydrogenation of adiponitrile to hexamethylenediamine with a cobalt skeletal catalyst. Khim. prom. no. 7:399-401 O-N '58.

(Adiponitrile) (Hexanediamine) (Cobalt) (MIRA 11:12)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240120019-1



APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240120019-1"